

Nokia Solutions and Network
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Murray Hill, NJ 07974-0636

August 22, 2022

Timco Engineering Inc.
FCC Authorized Telecommunication
Certification Body
849 N.W. State Road 45, P.O. Box 370
Newberry, Florida 32669

Subject: Application for Class II Permissive Change to FCCID: VBNAEQK-01 for Nokia AEQK AirScale MAA 64T64R 192AE n77 200W (CPRI) Operating over the n77 Spectrum.

Dear Examiner:

The Nokia **Airscale MAA 64T64R 192AE n77 200W (AEQK)** is a 64 port radio head that transmits 3.125 Watts per port over the n77 spectrum (3700 – 3980 MHz). This product was Certified for single 20MHz, 40 MHz, and 100 MHz 5G-NR carriers utilizing QPSK, 16 QAM, 64QAM and 256QAM modulation formats. The 64 individual transmit ports are identical in design, rated power and performance.

A Class II Permissive Change was filed on May 14, 2021 to add modes of operation of 5G-NR capability for 50, 60, 80, and 90 MHz Single Carriers, and 20+20 MHz, 40+40 MHz and 50+50 MHz Multicarrier operation to the existing Grant.

This Class II Change is due to an alternate component change. The new components (**DPLL IC change from P452781(ZL80062) to P605657(RC38612)**) have the same basic function as the old components and only a small area of the PCB has been changed to accommodate the new chip. No change in radio parameters has occurred. Two single carrier (20 and 100 MHz) and one dual carrier (50+50 MHz) configurations were tested. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G-NR operation.

Enclosed in this application package are the FCC 731 Form, an Agent Authorization letter, the required measurement data and other required exhibits specific to this request for a FCC Class II Change authorization of the subject product. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27 following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures. The supporting exhibits are assembled and presented in accordance with the *Table of Contents* attached below.

Should there be any questions or procedural issues please feel free to contact me by email and/or phone.

Sincerely,

A handwritten signature in blue ink, appearing to read "Raymond J. Johnson".

Raymond J. Johnson

Technical Manager

Nokia Global Product Compliance Laboratory

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Filing Engineer

A handwritten signature in blue ink, appearing to read "Niles Patel".

Niles Patel

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Required Exhibits:

Exhibit

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2	Section 2.911(d)	Qualifications and Certifications
3	Section 2.1033(c)(21)	Photographs of the Test Setups
4	FCC Test Report	
5	Section 2.1033(c) (10)	Schematic Diagrams
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